

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Agricultural Research Division News & Annual
Reports

Agricultural Research Division of IANR

7-1981

Agricultural Experiment Station News July 1981

Follow this and additional works at: <https://digitalcommons.unl.edu/ardnews>



Part of the [Agriculture Commons](#)

"Agricultural Experiment Station News July 1981" (1981). *Agricultural Research Division News & Annual Reports*. 165.

<https://digitalcommons.unl.edu/ardnews/165>

This Article is brought to you for free and open access by the Agricultural Research Division of IANR at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Agricultural Research Division News & Annual Reports by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.



THE AGRICULTURAL EXPERIMENT STATION
INSTITUTE OF AGRICULTURE
AND NATURAL RESOURCES
UNIVERSITY OF NEBRASKA-LINCOLN 68583

July 1981 Vol. 14 No. 12

Agricultural Experiment Station News

From the Director's Desk

Gudmundsen Sandhills Research Center

The Gudmundsen Sandhills Research Center near Whitman was formally dedicated on June 26. This outstanding resource, made available by Mr. and Mrs. Elmer Gudmundsen through the generous gift of their ranch to the University of Nebraska Foundation, will provide a permanent site for range and livestock research programs in the Sandhills.

It is anticipated that the Gudmundsen Sandhills Research Center also will serve IANR extension and teaching programs.

A multidisciplinary planning committee has been appointed to develop plans for this research location. Persons who have served in this planning effort to date include: Neal Baxter, John Campbell, Donald Clanton, Gene Deutscher, Robert Gast, Gary Hergert, Don Hudson, Donald Huls, James Nichols, Robert Oltjen, Irvin Omtvedt, George Pfeiffer, Patrick Reece, Ivan Rush, Warren Sahs, Charles Strasia, James Stubbendieck, Lavon Sumption, John Ward, and John Weihing. As programs are developed at the center, additional persons may be added to this group. A lay advisory committee of Sandhills ranchers and businessmen will be appointed soon.

An executive committee, consisting of Lavon Sumption, John Weihing and Warren Sahs, has had responsibility for broad policy and management decisions regarding this facility. Dr. Donald Clanton has been designated Program Coordinator, and Michael Knott is the resident Ranch Manager.

Initiating research activity at a new location is both a challenge and an opportunity. The Gudmundsen facility provides IANR with an opportunity to develop new and innovative research programs of importance to the Nebraska Sandhills. The Planning Committee is developing research projects and facilities plans which will allow IANR to make effective use of this outstanding resource.

Except for a small area involved in intensive research on crop production, soil fertility and irrigation research, the Sandhills Agricultural Laboratory leases will not be renewed beyond their expiration at the end of 1981. A negotiated extension of the lease on this small area for an additional three years is pending approval.

Widaman Trust

Distinguished Graduate Assistant Stipends

The Agricultural Experiment Station has awarded seven Widaman Trust Distinguished Graduate Assistant

Stipends to outstanding graduate students for the 1981-82 year. Recipients, and their graduate study areas and thesis topics are:

David J. Foster, Agronomy; Disease resistance to viruses in maize

Romanus G. Monji, Agricultural Economics; Impact of inheritance tax laws and various forms of business organization upon the resultant structure of agriculture

Jimmie Lee Nelssen, Animal Science; Effect of nutrition on the reproductive performance of sows

Thomas McAdam Perring, Entomology; Effects of microenvironment and corn physiology on the population dynamics of the banks grass mite

Nancy E. Pfeiffer, Biochemistry; Investigation of the proteolytic enzymes of soybean root nodules and their role in regulation of the nitrogen fixation process occurring in root nodules

Geraldine Marie Russo, Plant Pathology; Characterization of a major protein found in Sclerotia of *Sclerotinia sclerotiorum* study of the regulation of its synthesis and regradation

John B. Solie, Agricultural Engineering; Application of herbicide subsurface to control weeds and leave residue on the surface to control soil erosion

Experiment Station Advisory Council

Four new members were elected recently to the Experiment Station Advisory Council. They are:

Dale G. Anderson, Professor, Agricultural Economics

Marvin B. Rhodes, Associate Professor, Veterinary Science

Khem M. Shahani, Professor, Food Science and Technology

D. Murray Danielson, Professor, Animal Science, North Platte Station

They will join the following staff to make up the Experiment Station Advisory Council for 1981-82;

Gerald R. Bodman, Associate Professor, Agricultural Engineering - Chairman

Robert A. Olson, Professor, Agronomy

Ralph E. Neild, Professor, Horticulture

John K. Ward, Professor, Animal Science

Eric D. Kerr, Professor, Plant Pathology, Panhandle Station

Sincere thanks goes to the following staff just completing their terms on the Council:

Ray Supalla, Agricultural Economics

Lowell Satterlee, Food Science and Technology

Don Ferguson, Veterinary Science

LeRoy Peters, Entomology, South Central Station

Reorganization of Science and Education Administration

Experiment Station Letter 1603, dated June 19, 1981, reports the following:

A USDA reorganization was announced by Secretary John R. Block on June 17. SEA has been split into four program agencies: Agricultural Research Service, Cooperative State Research Service, Extension Service, and National Agricultural Library. Block said he decided to delegate greater authority to the administrators of the major science and education programs in an effort to strengthen the effectiveness of these programs and make them more efficient.

ARS, CSRS, and Extension administrators will head their agencies and report to the Director of Science and Education. The NAL will be headed by a Director.

Roy G. Arnold
Dean and Director

Sahs Sez

Update on Integrated Energy Farm, Field Laboratory

1. Landscaping has been completed on the planned farm site.
2. Irrigation is underway using alcohol for two internal combustion engines which power the pumps.
3. Bids on the alcohol building are to be reviewed July 8.

Grants and Contracts

| | |
|--|---------|
| Anderson, B. (Agronomy) - Osler Farms and Philip Geertson | 505 |
| Arnold, R. G. (Director's Office) - USDA/SEA/CR | 203,947 |
| Bashford, L. L. (Ag Engineering) - Nebraska Energy Office | 249,992 |
| Boosalis, M. G. (Plant Pathology) - USDA/SEA | 2,000 |
| Brandle, J. R. (Forestry, Fisheries & Wildlife) - Nebraska Railroad Association | 2,460 |
| Brink, D. (Animal Science) - A. H. Robins Company | 10,000 |
| Bullerman, L. B. (Food Science & Technology) - General Mills, Inc. | 1,000 |
| Burnside, O. C. (Agronomy) - Mobil Chemical Company | 1,500 |
| Burnside, O. C. (Agronomy) - Velsicol Chemical Company | 750 |
| Burnside, O. C. (Agronomy) - Shell Development Company | 3,900 |
| Burnside, O. C. (Agronomy) - Stauffer Chemical Company | 1,000 |
| Burnside, O. C. (Agronomy) - Rohm and Haas | 1,000 |
| Campbell, J. B. (North Platte Station) - ICI Americas, Inc. | 500 |
| Campbell, J. B. (North Platte Station) - Dow Chemical Company | 1,000 |
| Campbell, J. B. (North Platte Station) - Philips Roxane, Inc. | 2,000 |
| Chollet, R. (Ag Biochemistry) - U. S. Department of Energy | 50,000 |
| Clanton, D. C. (North Platte Station) - Hoffmann-La Roche Inc. | 6,000 |
| Compton, W. A. (Agronomy) - North American Plant Breeders | 40 |
| Compton, W. A. (Agronomy) - Pioneer Hi-Bred International, Inc. | 40 |
| Compton, W. A. (Agronomy) - Columbiana Seed Company | 20 |
| Compton, W. A. (Agronomy) - Northrup King Company | 40 |
| Compton, W. A. (Agronomy) - Asgrow Seed Company | 40 |
| Compton, W. A. (Agronomy) - DeKalb Ag Research, Inc. | 40 |
| Compton, W. A. (Agronomy) - O's Gold Seed Company | 20 |
| Compton, W. A. (Agronomy) - O's Seed Company, Ramy Seed Company, Caisse Nationale De Credit Agricole | 100 |
| Coyne, D. P. (Horticulture) - Rocky Mountain Bean Dealers Association | 4,000 |
| Danielson, D. M. (North Platte Station) - Hoechst-Roussel Pharmaceutical, Inc. | 2,000 |
| Deutscher, G. H. (North Platte Station) - American-International Charolais Ass'n. | 1,750 |

| | |
|--|--------|
| Deutscher, G. H. (North Platte Station) - International Minerals & Chemical Corporation | 50,000 |
| Dickason, E. A. (Entomology) - FBC Chemical, Inc. | 500 |
| Dickason, E. A. (Entomology) - Mobay Chemical Corporation | 500 |
| Dickinson, E. O. (Vet Science) - Nebraska SPF Swine Accrediting Agency | 583 |
| Dillon, R. (Ag Education) - Nebraska Department of Education | 18,557 |
| Dreier, A. F. (Agronomy) - Nebraska Soybean Development Utilization & Marketing Board | 49,250 |
| Eisenhauer, D. E. (South Central Station) - Little Blue Natural Resources District | 24,106 |
| Eldridge, F. (Animal Science) - American Breeder's Service | 1,185 |
| Eldridge, F. (Animal Science) - Lincoln Vet Clinic | 40 |
| Fenster, C. R. (Panhandle Station) - Mobay Chemical Corporation | 800 |
| Fenster, C. R. (Panhandle Station) - Velsicol Chemical Corporation | 750 |
| Fenster, C. R. (Panhandle Station) - American Hoechst Corporation | 1,000 |
| Ferguson, D. L. (Vet Science) - Merck and Company, Inc. | 12,293 |
| Fischbach, P. E., Splinter, W. E., Thompson, T. L. (Ag Engineering) - MIT | 30,500 |
| Flowerday, A. D. (Agronomy) - Olin Corporation | 3,840 |
| Flowerday, A. D. (Agronomy) - BASF Wyandotte Corporation | 700 |
| Frank, K. (South Central Station) - Dow Chemical Company | 2,000 |
| Gold, R. E. (Environmental Programs) - The Dow Chemical Company | 1,000 |
| Gustafson, W. A. (Southeast Extension & Research Center) - Cyril Bish | 50 |
| Hergert, G. W. (North Platte Station) - Georgia-Pacific Corporation | 500 |
| Hergert, G. W. (North Platte Station) - Dow Chemical Company | 2,000 |
| Hudson, D. (North Platte Station) - Norden Laboratories | 480 |
| Johnson, R. K., Zimmerman, D. R. (Animal Science) - Nebraska Pork Producers Ass'n. | 4,500 |
| Johnson, V. A. (Agronomy) - USDA/SEA | 40,000 |
| Kelling, C. L. (Vet Science) - Nebraska Pork Producers Association | 3,935 |
| Kerr, E. D., Yonts, C. D., Wilson, R. G. (Panhandle Station) - Grower-G. W. Joint Research Committee, Inc. | 10,000 |
| Klopfenstein, T. (Animal Science) - Eli Lilly and Company | 3,600 |
| Klopfenstein, T. (Animal Science) - Hoffmann-LaRoche Inc. | 10,000 |

| | | | |
|--|---------|--|--------|
| Klopfenstein, T. (Animal Science) - Amax Inc. | 4,800 | Steadman, J. R. (Plant Pathology) - E. I. DuPont deNemours & Company | 1,500 |
| Knoche, H. W., Daly, J. M., Gross, M. L. (Ag Biochemistry) - National Science Foundation | 31,000 | Steadman, J. R. (Plant Pathology) - Rohm and Haas Company | 500 |
| Lindgren, D. T. (North Platte Station) - The O. M. Scott & Sons Company | 1,000 | Stetson, L. E. (Ag Engineering) - Nebraska Energy Office | 10,000 |
| Loveday, H. D. (Animal Science) - Houston Livestock Show & Rodeo | 500 | Sullivan, T. W. (Animal Science) - International Minerals & Chemical Corporation | 7,500 |
| Martin, A. R. (Agronomy) - BASF Wyandotte Corporation | 600 | Torres-Medina, A. (Vet Science) - World Health Organization | 15,000 |
| Martin, A. R. (Agronomy) - Stauffer Chemical Company | 1,500 | Vogel, K. P. (Agronomy) - Anna H. Elliott Fund | 6,500 |
| Martin, A. R. (Agronomy) - 3M Company | 500 | Waller, S. S. (Agronomy) - Webster County Natural Resources | 675 |
| Martin, A. R. (Agronomy) - North Dakota State/Old West Regional Commission | 15,928 | Watkins, J. E. (Plant Pathology) - Rohm and Haas | 500 |
| Mayo, Z. B. (Entomology), Witkowski, J. (Northeast Station) - Dow Chemical Company | 11,000 | Watkins, J. E. (Plant Pathology) - Ciba-Geigy | 500 |
| Mayo, Z. B. (Entomology) - Dow Chemical Company | 2,000 | Wicks, G. A. (North Platte Station) - Chevron Chemical Company | 1,250 |
| Mayo, Z. B. (Entomology) - Mobil Chemical Company | 1,500 | Wicks, G. A. (North Platte Station) - E. I. DuPont de Nemours & Company | 1,000 |
| Moomaw, R. (Northeast Station) - Mobil Chemical | 600 | Wicks, G. A. (North Platte Station) - Monsanto Agricultural Products Company | 750 |
| Moomaw, R. (Northeast Station) - Shell Development Company | 1,250 | Wicks, G. A. (North Platte Station) - Shell Development Company | 5,000 |
| Moomaw, R. (Northeast Station) - Monsanto | 1,000 | Wilson, R. G. (Panhandle Station) - Rocky Mountain Bean Dealers Association | 1,500 |
| Moomaw, R. (Northeast Station) - American Hoechst Corporation | 1,000 | Wilson, R. G. (Panhandle Station) - Velsicol Chemical Corporation | 1,000 |
| Moomaw, R. (Northeast Station) - Uniroyal | 1,000 | Wilson, R. G. (Panhandle Station) - BASF Wyandotte Corporation | 1,000 |
| Moomaw, R. (Northeast Station) - 3M | 500 | Wilson, R. G. (Panhandle Station) - Rohm and Haas Company | 500 |
| Moomaw, R. (Northeast Station) - Dow Chemical Company | 250 | Wilson, R. G. (Panhandle Station) - The Dow Chemical Company | 500 |
| Partridge, J. E. (Plant Pathology) - Stauffer Chemical Company | 15,000 | Wilson, R. G. (Panhandle Station) - E. I. DuPont de Nemours & Company | 770 |
| Penas, E. J. (Southeast Extension & Research Center) - Dow Chemical Company | 1,000 | Wilson, R. G. (Panhandle Station) - Monsanto Company | 1,750 |
| Peo, E. R. (Animal Science) - Crows Hybrid Corn Company | 19,900 | Wilson, R. G. (Panhandle Station) - FBC Chemicals, Inc. | 1,000 |
| Peters, L. L. (South Central Station) - Dow Chemical Company | 1,250 | Wilson, R. G. (Panhandle Station) - Nor-Am Ag. Products Inc. | 500 |
| Rhodes, M. B. (Vet Science) - A. V. L. Inc. | 65 | Wilson, R. G. (Panhandle Station) - American Hoechst Corporation | 1,500 |
| Rhodes, M. B. (Vet Science) - Nebraska Pork Producers Association | 5,000 | Wilson, R. G. (Panhandle Station) - Agricultural Products Company | 500 |
| Roeth, F. W. (South Central Station) - Shell Chemical Company | 650 | Wilson, R. G. (Panhandle Station) - Uniroyal | 1,000 |
| Roeth, F. W. (South Central Station) - Rohm and Haas Company | 250 | Witkowski, J. (Northeast Station) - Shell Development Company | 300 |
| Roeth, F. W. (South Central Station) - Stauffer Chemical Company | 1,200 | Witkowski, J. (Northeast Station) - Chevron Chemical Company | 750 |
| Sander, D. H. (Agronomy), Rehm, G. W. (Northeast Station) - Potash and Phosphate Institute | 6,840 | Witkowski, J. (Northeast Station) - Dow Chemical Company | 1,500 |
| Schneider, N. R. (Vet Science) - Nebraska Pork Producers Association | 2,000 | Witmus, H. D. (Ag Engineering) - Eli Lilly and Company | 1,500 |
| Schulte, D. (Ag Engineering) - Blount Agribusiness, Donation/Gift | 110,000 | Woodward, J. (Director's Office) - USDA/SEA/CR | 29,059 |
| Schuster, M. L. (Horticulture) - The Popcorn Institute | 4,000 | Yonts, C. D. (Panhandle Station) - Anna H. Elliott Fund | 9,170 |
| Shearman, R. C. (Horticulture) - E. I. DuPont deNemours & Company | 500 | | |

Journal Articles - Submitted for Publication (contact authors for more information)

6137. Soil Loss and Sediment Produced from an Area of Severely Eroded Loessal Soil in Southeastern Nebraska. D. T. Lewis and M. J. Lepele. Journal of Soil and Water Conservation.
6138. Anthelmintic Activity of Albendazole Premix Against Adult *Metastrongylus apri* in Swine. D. L. Ferguson. Journal of Parasitology.
6139. The Rediscovery of Faith and Hope in Dealing with Crises. Barbara Chessier. Journal of Orthopsychiatry.
6140. Systems of Fallowing for Winter Wheat in Western Nebraska. C. R. Fenster and G. A. Wicks. Agronomy Journal.
6141. Indirect Solid-Phase Microradioimmunoassay for Detection of *Ascaris suum* Antibodies in Swine Sera. M. B. Rhodes, L. A. Staudinger and R. A. Hart. American Journal of Veterinary Research. v42 (5):868-870, 1981.
6142. Antitumor Component(s) of Yogurt. 1. Fractionation. A. D. Ayebo, K. M. Shahani and R. Dam. Journal of Dairy Science.
6143. Performance of Blends of Short, Medium, and Tall Sorghum. H. J. Gorz and F. A. Haskins. Crop Science.
6144. Windbreaks and Crops. S. N. Ogbuehi. Crops and Soils Magazine.
6145. Niacin/Pantothenic Acid/Protein Interrelationships Affecting the Nutritive Values of Winter Wheat for Humans. B. Unver, C. Kies and H. M. Fox. Nutrition Reports International.
6146. Moisture Storage, Water Use and Corn Yields for Seven Tillage Systems Under Water Stress. Howard Wittmuss and Attila Yazar. Proceedings of ASAE Conference.
6147. Effects of Relative Planting Dates in Bean (*Phaseolus vulgaris* L.) and Maize (*Zea mays* L.) Associated Cropping Systems. C. A. Francis, Martin Prager and Gerardo Tejada. Field Crops Research - Netherlands.
6148. Transformation of *Pseudomonas syringae* with Non-conjugative R-factor Plasmids. Dennis C. Gross and Anne K. Vidaver. Canadian Journal of Microbiology.
6149. Irrigation Management - Energy. James R. Gilley, Dale F. Heerman and LaVerne E. Stetson. Proceedings, Second National Irrigation Symposium.
6150. The Role of Microclimate in Energy Use Efficiency. James R. Brandle. Proceedings: Tree Crops for Energy Production on Farms.
6151. A Search for Genetic Markers Linked to the *ms₂* Locus in Soybeans. J. W. Keaschall, J. E. Specht and J. H. Williams. Crop Science.
6152. Population Dynamics of the Stable Fly, *Stomoxys calcitrans* (L.) Under Field Conditions. R. L. Rasmussen and J. B. Campbell. Environmental Entomology.
6153. Heat-Induced Gelation and Protein-Protein Interaction of Actomyosin. J. C. Acton, M. A. Hanna and L. D. Satterlee. Food Biochemistry.

6154. Fuel Alcohol Production from Waste Materials. B. A. Friend and K. M. Shahani. Chapter in impending book entitled "Fuels from Agricultural Products."
6155. Maize (*Zea mays* L.) and Bush Bean (*Phaseolus vulgaris* L.) Density Interactions in Tropical Intercropping Systems. C. A. Francis, M. Prager and G. Tejada. Field Crops Research.
6156. Effect of Herbicide and Manure Applications on Root Rot and Growth of Fieldbeans (*Phaseolus vulgaris*). L. S. Quakenbush and R. G. Wilson. Weed Science.
6157. The Nebraska Farm Accident Example 1970-1979. Rollin D. Schnieder. ASAE Winter Meeting Proceedings, 1980.
6158. A Review of a 1972 Safety Research Needs Study. Rollin D. Schnieder. ASAE Winter Meeting Proceedings, 1980.
6159. Effect of Item Arrangement, Knowledge of Arrangement, and Test Anxiety on Two Scoring Methods. Barbara S. Plake, Patricia Thompson and Stephen R. Lowry. Journal of Experimental Education.
6160. Biological Aspects of Iron in Plants. R. B. Clark, J. C. Brown, R. A. Olsen and J. H. Bennett. Iron Document for EPA.
6161. Hydrocyanic Acid Potential of Sorghum Seedlings Grown Under Two Radiation Levels. F. A. Haskins, H. J. Gorz and R. B. Clark. Crop Science.
6162. Reducing the Incidence of Short Estrous Cycles in Beef Cows with Norgestomet. J. A. Ramirez-Godinez, G. H. Kiracofe, R. M. McKee, R. R. Schalles and R. J. Kittok. Theriogenology.
6163. Changing Weed Problems with Conservation Tillage. O. C. Burnside. Transactions of the American Society of Agricultural Engineers.
6164. Pesticide Application Methodology. Leonard L. Bashford. Proceedings for the Colorado Crop Protection Institute. 10th Annual Proceedings, November 12-13, 1980.
6165. Distribution of a Barley Stripe Mosaic Virus-Precipitating Lectin on Purified Virus Particles. L. Giunchedi and W. G. Langenberg. Journal of General Virology.
6166. Evaluation of Fungicides for Control of Blackspot, 1980. J. A. Houfek, J. E. Watkins and D. H. Steinegger. Fungicide & Nematicide Tests.
6167. Fungicide Control of Leaf Rust & Tan Spot of Winter Wheat, 1980. J. E. Watkins and B. L. Doupnik, Jr. Fungicide & Nematicide Tests.
6168. Control of Stem Rust on a Kentucky Bluegrass Turf, 1980. J. E. Watkins, J. A. Houfek and R. C. Shearman. Fungicide & Nematicide Tests.
6169. Spotted Alfalfa Aphid (*Therioaphis maculata* (Buckton)): Water Stress Amino Acid Content, and Plant Resistance. Nancy E. Lorenz DeVries and George R. Manglitz. Journal of Kansas Entomological Society.

6170. An Unusual Large Subunit Multiple Polypeptide Composition of Perennial Ryegrass Ribulosebisphosphate Carboxylase/Oxygenase. Sarjit Johal and Raymond Chollet. FEBS Letters. v124 (1):75-78, February, 1981.
6171. Silicone Additive Facilitates Epoxy Plastic Sectioning. Willem G. Langenberg. Stain Technology.
6172. Reactions of Identity of a Barley Stripe Mosaic Virus-Precipitating Lectin Isolated from Wheat, Rye and Barley. W. G. Langenberg and L. Giunchedi. Biochemica et Biophysica Acta.
6173. Divergent Selection for Hydrocyanic Acid Potential in Sudangrass. H. J. Gorz, F. A. Haskins and K. P. Vogel. Crop Science.
6174. A Wet-Harvested Spore is Not a Native Spore. Kenneth W. Nickerson, Shelby N. Freer and James L. Van Etten. Experimental Mycology.
6175. Characterization of Biological Types of Cattle (Cycle II): V. Carcass Wholesale Cut Composition. R. M. Koch, M. E. Dikeman and L. V. Cundiff. Journal of Animal Science.
6176. Labor Time Analysis: Type A Versus A La Carte Meal Service in a Public School System. Marie E. Knickrehm, Rebecca Jo McConnell and Claire Anne Tunkel Berg. School Food Service Research Review.
6177. Use of a Diastase Enzyme Pre-Treatment for Determining Cell Wall Constituents in Corn and Sorghum Silages. D. H. Smith, G. C. Marten and R. A. Britton.
6178. Evidence for a Functional ATP-Citrate Lyase:NADP-Malic Dehydrogenase Pathway in Bovine Adipose Tissue: Enzyme and Metabolite Levels. Stephen B. Smith and Ronald L. Prior.
6179. Metabolic Pathways Involved in Lipogenesis from Lactate and Acetate in Bovine Adipose Tissue: Effects of Metabolic Inhibitors. Ronald L. Prior, Stephen B. Smith and J. J. Jacobson.
6180. Comparison of Ribosomal Proteins of Filamentous Fungi by Gel Electrophoresis and Immunochemical Cross-Reactions. J. E. Partridge, P. C. Entrekin and M. R. Marshall. Phytopathology.
6181. Enzymic and Physicochemical Characterization of Ribulose 1,5-Bisphosphate Carboxylase/Oxygenase from Diploid and Tetraploid Cultivars of Perennial Ryegrass. Joan M. Rejda, Sarjit Johal and Raymond Chollet. Archives of Biochemistry and Biophysics.
6182. Antitumor Component(s) of Yogurt. II. Purification and Properties. A. D. Ayebo, K. M. Shahani and R. Dam. Journal of Dairy Science.
6183. Developing Hybrids of Corn and Sorghum for Future Cropping Systems. Charles A. Francis. American Seed Trade Assn.
6184. A Comparison of Wicking Rates of Soft Braid Nylon Rope for Glyphosate and 2,4-D. William E. Lueschen, John D. Furrer and Alex R. Martin. North Central Weed Control Conference.

6185. Effectiveness of Glyphosate and 2,4-D for Controlling Sunflower, Kochia and Velvetleaf in Soybeans with New Generation Applicators. William E. Lueschen, Alex R. Martin and John D. Furrer. North Central Weed Control Conference.
6186. Screening Phytopathogenic Pseudomonads for a Double-stranded RNA Modification and Restriction System. Diane A. Cuppels, James L. Van Etten, Pat Lambrecht and Anne K. Vidaver. Current Microbiology.
6187. Immunochemical Identification of *Fusarium moniliforme* Ribosomes from Diseased Corn (*Zea mays* L.) Stalk Tissue. Michael R. Marshall and J. E. Partridge. Physiological Plant Pathology.
6188. Protecting Corn from Herbicides Injury with R-25788. A. R. Martin and O. C. Burnside. Agronomy Journal.
6189. Genetics of Ovule Number, Seed Number Per Pod, Seed Weight and Association with Several Traits in Dry Edible Bean (*Phaseolus vulgaris* L.) Crosses and Implications in Breeding. Faisal A. Al-Mukhtar and Dermot P. Coyne. Journal of the American Society of Horticultural Science.
6190. Inheritance and Linkage of Flower Color, Pod Color, Pod Tip Shape, Days to First Flower, and Maturity in Dry Bean (*Phaseolus vulgaris* L.) Crosses. Faisal A. Al-Mukhtar and Dermot P. Coyne. Journal of the American Society of Horticultural Science.
6191. Effects of Water Stress Preconditioning on Net Carbon Exchange of Grain Sorghum. J. M. Bennett and C. Y. Sullivan. Photosynthetica.
6192. Standard Tests to Characterize Pest Resistance in Alfalfa Cultivars. W. R. Kehr. Insects and Diseases are Involved.
6193. Characterization of Biological Types of Cattle (Cycle III): III. Carcass Composition, Quality and Palatability. R. M. Koch, M. E. Dikeman and J. D. Crouse. Journal of Animal Science.
6194. Cyanogenesis in Dhurrin-Containing Forage Grasses. H. J. Gorz, F. A. Haskins and K. P. Vogel. Proceedings of the XIV International Grassland Congress.
6195. Loneliness Among Mexican American Migrant Children. Barbara Chesser and Dania Inguanzo. Social Science Quarterly.
6196. A State Soil For Nebraska. D. T. Lewis. Soil and Water Conservation.
6197. Relationship Between Training Methods and Labor Turnover. Marie E. Knickrehm and Cheryl S. Davis. Journal of the American Dietetic Association.
6198. Factors Affecting Puffing and Sensory Characteristics of Extruded Egg Products. G. W. Froning, Jane Clegg and Carol Long. Poultry Science Journal.
6199. Tractor Modification for Paraplegics. Leonard L. Bashford. 1980 Winter Meeting, American Society of Agricultural Engineers.
6200. Ribulose-1,5-Bisphosphate Carboxylase/Oxygenase: Enzymic, Physicochemical and Nutritional Properties. Sarjit Johal and Raymond Chollet. What's New in Plant Physiology. vii (12);45-48, 1980.

6201. Canonical Correlation Analysis for Evaluating the Impact of Atmospheric Conditions on Feedlot Cattle Performance. Robert C. Balling, Jr. Canadian Journal of Animal Science.
6202. Drying Scheduling - A Procedure for Layer Filling Low-Temperature Corn Drying Systems. R. O. Pierce and T. L. Thompson. Transactions of the ASAE.
6203. Evaluation, Variation and Genetic Control of Seed-Coat Whiteness in Dry Beans (*Phaseolus vulgaris* L.). Safi S. Korban, Dermot P. Coyne and John L. Weihing. Journal of the American Society of Horticultural Science.
6204. Rate of Water Uptake and Sites of Water Entry in Seeds of Different Cultivars of Dry Beans (*Phaseolus vulgaris* L.). Safi S. Korban, Dermot P. Coyne and John L. Weihing. HortScience.
6205. Heritability Estimates for Caryopsis Weight, Seedling Weight, and First Year Forage Yield in Sand Bluestem (*Andropogon hallii*). K. L. Glewen and K. P. Vogel. Crop Science.
6206. Responses of Sorghum and Corn to Limited Irrigation. C. Y. Sullivan, D. G. Watts, D. P. Garrity and R. E. Maurer. Proceedings, 35th Annual Corn and Sorghum Research Conference.
6207. Value and Potential Use of Crop Residues and Byproducts in Dairy Rations. Terry Klopfenstein and Foster G. Owen. Journal of Dairy Science.
6208. A New Bacterium Pathogenic for Beans (*Phaseolus vulgaris* L.). M. L. Schuster, Anne M. Schuster and D. S. Nuland. Ann. Appl. Biol.
6209. Effect of Mechanical Tenderizing and Blade Size on Beef Round Steak Characteristics. Roger W. Mandigo and Dennis G. Olson. Journal of Food Science.
6210. Accelerated Degradation of EPTC in Soils with Prior Exposure to EPTC. T. Obrigawitch, R. G. Wilson, A. R. Martin and F. W. Roeth. Weed Science.
6211. Cytoplasmic Male Sterility and Restriction Endonuclease Analysis of Organelle DNAs in *Sorghum Bicolor*. M. F. Conde, D. R. Pring, K. F. Schertz and W. M. Ross. Crop Science.
6212. Characterization and Evaluation of *Aspergillus oryzae* Lactase Coupled to a Regenerable Support. B. A. Friend and K. M. Shahani. Biotechnology & Bioengineering.
6213. Methyl Parathion Removal from Denim Fabrics by Selected Laundry Procedures. Carol Easley, Joan Laughlin, Roger Gold and Duane Tupy. Archives of Environmental Contamination and Toxicology.
6214. UV Degradation of Fiber and Finish in Flame Retardant Cotton and Polyester Fabrics for Work Garments. Joan Laughlin. Journal of Consumer Product Flammability.
6215. Root Development of Winter Wheat as Related to Tillage in Western Nebraska. W. W. Wilhelm, L. N. Mielke and C. R. Fenster. Agronomy Journal.

6216. Yield, Vigor and Persistence of Sand Lovegrass Following Clipping Treatments. Lowell E. Moser and L. J. Perry. Range Management.
6517. Influence of Diet on Amino Acid Absorption in Beef Cattle and Sheep. Ronald L. Prior, G. B. Huntington and Robert A. Britton.
6518. A Viral Infection of the Green Alga in a *Hydra viridis-chlorella* Symbiotic System. Russel H. Meints, James L. Van Etten, Daniel Kuczmarski, Kit Lee and Barbara Ang. Virology.
6519. Isolation and Characterization of a Virus from the Intracellular Green Alga Symbiotic with *Hydra viridis*. James L. Van Etten, Russ Meints, Dwight Burbank, Dan Kuczmarski, Diane Cuppels and Les Lane. Virology.
6520. Nutritional Value of Proso Millet in Layer Diets. E. S. Luis, T. W. Sullivan and L. A. Nelson. Poultry Science.
6521. Nutrient Composition and Feed Value of Proso Millets, Sorghum Grains and Corn in Broiler Diets. E. S. Luis, T. W. Sullivan and L. A. Nelson. Poultry Science.
6522. Nutritional Value of Proso Millets, Sorghum Grains and Corn in Turkey Starter Diets. E. S. Luis, T. W. Sullivan and L. A. Nelson. Poultry Science.
6523. Synergism Studies with Binary Mixtures of Permethrin Plus Methylparathion, Chlorpyrifos, and Malathion on European Corn Borer Larvae. Frederick S. Koziol and John F. Witkowski. Journal of Economic Entomology.
6524. Influence of Concentrations of K and Mg in Nutrient Solutions on Sorghum. Chemical Composition. O. O. Ologunde and R. C. Sorensen. Soil Science Journal
6525. A Study of the Involvement by Nebraska Vocational Education Secondary School Advisory Councils in the Preparation of the Local Plan for Vocational Education. Roy D. Dillon. Journal of the American Association of Teacher Educators in Agriculture.
6526. Further Investigations in the Measurement of Leaf Wetness. A. Weiss. Plant Disease.
6527. Nitrogen Fertilizer from Solar Energy. Bradley K. Rein, Neil W. Sullivan and Paul E. Fischbach. Transactions of the ASAE.
6528. Food Way Changes of Iranian Students at an American University. C. Kies and G. T. Mianians. Nutrition Reports International.
6529. Weed Control in Established Alfalfa (*Medicago sativa*). Robert G. Wilson, Jr. Weed Science.
6530. Registration of Bennett Wheat. J. W. Schmidt, V. A. Johnson, P. J. Mattern, A. F. Dreier and D. V. McVey. Crop Science.
6531. Registration of Centurk 78 Wheat. J. W. Schmidt, V. A. Johnson, P. J. Mattern, A. F. Dreier and D. V. McVey. Crop Science.